



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,007	10/28/2003	David Y. Wang	TWI-23310	4254

28584 7590 03/10/2006

STALLMAN & POLLOCK LLP
353 SACRAMENTO STREET
SUITE 2200
SAN FRANCISCO, CA 94111

EXAMINER

ROSENBERGER, RICHARD A

ART UNIT	PAPER NUMBER
----------	--------------

2877

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8K

Office Action Summary	Application No. 10/695,007	Applicant(s) WANG, DAVID Y.	
	Examiner Richard A. Rosenberger	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/28/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 2877

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3, 9 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Norton et al (US 6,778,273).

See concave mirror 10 and convex mirror 9 in figure 1 of the Norton et al patent. In claim 13, the preamble language “for normal incidence broadband reflectometry” is non-limiting statement of intended use for which there is not structural support in the claim.

4. Claims 1-2, 4, 7-8, 10, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norton et al (US 6,778,273) in view of the acknowledged prior art of figure 3 in this application.

Figure 1 of Norton et al shows a measuring system with both illumination and light receiving optics comprising a concave mirror and a convex mirror in series. The system of Norton et al does not teach selecting and arranging the mirrors so that the light to of from the convex mirror is collimated, as in claims 1, 7, and 14. It is known in the art, in such systems, that it can be useful to have the convex mirror receive collimated light or to collimate the received light; see the prior art arrangement of instant figure 3, which shows an on-axis version of the general type of system shown by both the instant prior art figure and by Norton. It would have been obvious to have the convex mirror of Norton et al collimate the light or to receive collimated light because, and shown by the instant prior art figure, it is known that having the light in similar arrangements collimated is useful.

The reference to Norton et al does not appear to disclose having the concave and convex mirrors substantially monocentric, as in claims 2, 4, 8, 10, and 15. The instant disclosure of the prior art notes that the prior art arrangement discussed above has the mirrors arranged so that they “are or nearly [are] monocentric” (instant specification, page 3, line 20). It would have been obvious to have this known arrangement of the mirrors of Norton et al as modified in the previous paragraph because this is a known manner of accomplishing this known, and known to be useful, result.

5. Claims 5, 6, 11, 12 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brierley (US 5,106,196).

The Brierley reference shows a system with light projecting and receiving optical systems including a concave off-axis paraboloid mirror (20, 22) and a flat mirror (38, 36) associated with each one to redirect the light to or from the concave mirror.

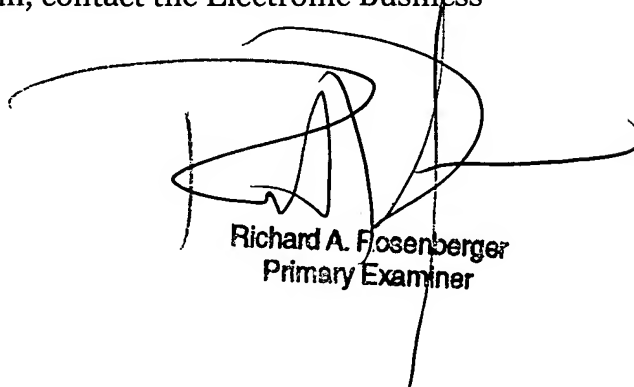
Brierley does not teach using such a system to direct light substantially normally onto, or to receive light at a substantially normal angle from, the sample. It would have been obvious to use either the light transmitting or light receiving system with any angle relative to the surface being tested because these are known optical systems for directing light to and receiving light from a surface and neither, by itself, depends upon the orientation of the surface for its individual use or operation.

6. Voelz (US 3,524,983) shows a system with curved mirrors (14, 20) associated with redirecting flat mirrors (12, 22).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger
23 September 2005



Richard A. Rosenberger
Primary Examiner